

Amendments to the Claims

Claims 1-9. (Cancelled)

10. (New) A process for manufacturing adapted, fluidic surfaces on gas turbine blades in a region of a flow inlet edge and/or a flow outlet edge of a gas turbine blade, comprising the steps of:

(a) generating a nominal milling program for manufacturing of fluidic surfaces in a region of a flow inlet edge and/or a flow outlet edge for an ideal gas turbine blade;

(b) measuring an area of an actual gas turbine blade in a region of a flow inlet edge and/or a flow outlet edge thereof;

(c) generating a milling program adapted to the actual gas turbine blade for manufacturing fluidic surfaces in the region of the flow inlet edge and/or the flow outlet edge for the actual gas turbine blade, wherein measured values determined in step (b) are used to adapt or change the nominal milling program generated in step (a) to the milling program for the actual gas turbine blade; and

(d) manufacturing the fluidic surfaces on the actual gas turbine blade in the region of the flow inlet edge and/or the flow outlet edge by milling with the use of the milling program generated in step (c), wherein, in a first partial step, coarse-milling is used to remove material in the region of the flow inlet edge and/or the flow outlet edge, and wherein, in a second partial step, fine-milling is used to automatically round the flow inlet edge and/or the flow outlet edge,

wherein the nominal milling program for the region of the flow inlet edge and/or the region of the flow outlet edge comprises several nominal milling paths including a first nominal milling path in a region of a suction side, a second nominal milling path in a region of a pressure side, and, interposed between the first and second nominal milling paths is a third nominal milling path for a transition region between the suction side and the pressure side, wherein each of the nominal milling paths comprises several nominal path points.

11. (New) The process according to Claim 10, wherein in step (b), the actual gas turbine blade is measured such that, in the region of the flow inlet edge and/or in the region of the flow outlet edge, respectively one series of measuring points is determined on the suction side and on the pressure side of the gas turbine blade, wherein each series of measuring points consists of several measuring points distributed over a height and/or a length of the flow inlet edge and/or the flow outlet edge.

12. (New) The process according to Claim 11, wherein in step (c), for each measuring point, a deviation between the ideal gas turbine blade and the actual gas turbine blade is determined, wherein these deviations are used to change the nominal milling program into the milling program for the actual gas turbine blade.

13. (New) The process according to 11, wherein the, or each, series of measuring points determined in the region of the suction side is used to change the first nominal milling path in the region of the suction side in such a manner that each nominal path point of the first nominal milling path having a corresponding measuring point is shifted by a value of deviation between the ideal gas turbine blade and the actual gas turbine blade in the region of the suction side.

14. (New) The process according to Claim 11, wherein an interpolation is performed for a nominal path point of a respective nominal milling path for which no corresponding measuring point is available.

15. (New) The process according to Claim 11, wherein the, or each, series of measuring points determined in the region of the pressure side is used to change the second nominal milling path in the region of the pressure side in such a manner that each nominal path point of the second nominal milling path having a corresponding measuring point is shifted by a value of deviation between the ideal gas turbine blade and the actual gas turbine blade in the region of the pressure side.

16. (New) The process according to Claim 10, wherein an interpolation is performed for the third nominal milling path located between the first nominal milling path of the suction side and the second nominal milling path of the pressure side in order to adapt the third nominal milling path to the actual gas turbine blade.

17. (New) The process according to Claim 14, wherein spline interpolations are performed.

18. (New) A method for manufacturing a fluidic surface on gas turbine blade in a region of a flow edge, comprising the steps of:

generating a nominal milling program for manufacturing the fluidic surface in the region of the flow edge, wherein the nominal milling program includes a first nominal milling path in a region of a suction side, a second nominal milling path in a region of a pressure side, and a third nominal milling path for a transition region between the suction side and the pressure side, wherein each of the nominal milling paths include a nominal path point;

measuring an area of the gas turbine blade in the region of the flow edge;

generating an actual milling program for manufacturing the fluidic surface in the region of the flow edge by changing the nominal milling program based on the measured area; and

manufacturing the fluidic surface in the region of the flow edge with the actual milling program, wherein in a first process step coarse-milling is used to remove material in the region of the flow edge, and wherein in a second process step fine-milling is used to round the flow edge.

19. (New) The method according to Claim 18, wherein the flow edge is a flow inlet edge.

20. (New) The method according to Claim 18, wherein the flow edge is a flow outlet edge.

21. (New) An apparatus for generating a milling program for manufacturing a fluidic surface on gas turbine blade in a region of a flow edge, comprising:

a processor, wherein the processor generates a nominal milling program for manufacturing the fluidic surface in the region of the flow edge, wherein the nominal milling program includes a first nominal milling path in a region of a suction side, a second nominal milling path in a region of a pressure side, and a third nominal milling path for a transition region between the suction side and the pressure side, wherein each of the nominal milling paths include a nominal path point;

and wherein the processor generates an actual milling program for manufacturing the fluidic surface in the region of the flow edge by changing the nominal milling program based on a measured area of the gas turbine blade in the region of the flow edge.

22. (New) The apparatus according to Claim 21, wherein the flow edge is a flow inlet edge.

23. (New) The apparatus according to Claim 21, wherein the flow edge is a flow outlet edge.